User Forecast for this system is:

1.Daily 100k app login

2.Daily 80k booking

3.Daily 50k purchase

4.Daily 25k journey complete

Per second transaction for the app log in is:(1000000/(24\*60\*60))=1.15

Per second transaction for the app log in is:(80000/(24\*60\*60))=0.92

Per second transaction for the app log in is:(500000/(24\*60\*60))=0.57

Per second transaction for the app log in is:(1000000/(24\*60\*60))=0.29

Without any additional query optimization,hardware support users will face API latency,transaction deadlock and occasionally transactions failure.DB layer may give up.Also CPU will be busy 80% of the time,RAM will also fill up soon.

Given high level technical architecture for this is:

1. 2 Load Balancers
2. 2 Web servers
3. 4 Application Servers
4. 2 Billing Servers
5. 2 DB Server

With the provided hardware support this operation can be sufficiently handled.